

Trigger Tables

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What's in a Name

- **PHYSICS_1_01[10,71,301]**
 - **Table name**
 - “1_01” is administrative major version
 - **Table version**
 - Name and version specify physics content
 - **Level 2 tag set**
 - CVS tags of Level 2 alpha code
 - Tied to physics table
 - **Level 3 tag set**
 - Level 3 executable, tcl and calibration set
 - Exe build driven from table
 - Code is base release plus a patch list
- Pet Peeve: Write the complete name in the e-log
 - “[10,71,301]” without the name is meaningless

Building and Testing

- **Table built with database GUI by trigger drones**
 - GUI instruction is on need-to-know basis
 - GUI performs consistency checks and builds L2 exe
 - Assigns L2 tagset
- **L3 gang builds tcl and exe**
 - Usually 1-2 hours
- **Initial test without beam**
 - This means no HEP colliding beam
 - Studies, injection, etc. are OK
- **Beam test usually at end of store**
 - Minimize integrated luminosity
- **If gurus approve, will make it default on the white board**

Building and Testing, 2

- Have ability to change L2 and L3 executables without new physics table
 - Fix bugs
 - Improve low-level code
- Occasionally will test new L2 or L3 tagset for existing table
- May subsequently change defaults
- For table (physics) changes, usually have round of PHYSICS_TEST tables before copying to PHYSICS
 - Attempt to limit confusion later

Decoupled Tables

- In usual mode of operation, Level 3 is driven by Level 2 decisions
 - Explicit paths
- For non-physics tables, can have Level 3 process all events the same way
 - Use for cosmics, L1/L2 tests, etc.
 - One tagset can be used for many tables
 - Usually have two current
 - Null
 - All reconstruction
 - When in doubt, use the current All-reco tagset for decoupled operation
 - Single output stream only
- Decoupled tables use different RunControl menu from physics tables